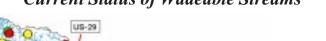


Patuxent River Basin

Percent Stream Miles

Per FIBI Category

Current Status of Wadeable Streams





Where is the Patuxent River Basin?

The Patuxent River basin is located in the Maryland counties of Anne Arundel, Calvert, Charles, Howard, Montgomery, Prince Georges, and St. Mary's. The Patuxent, Middle Patuxent, Little Patuxent, and Western Branch rivers are all part of the network of streams that make up the basin.



Many beautiful streams flow through the Patuxent basin.

The Fish Index of Biotic Integrity or FIBI is a measurement of stream quality based on fish communities.

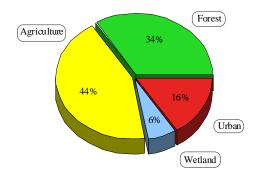
What Lives in Our Streams? *

Poor

Estimated Fish Abundance:	1.1million
Number of Fish Species:	44
Number of Gamefish Species:	2
Number of Reptile and Amphibian Spe	ecies: 26
Number of Freshwater Mussel Species	s: 2

^{*}Based on Maryland Biological Stream Survey collections in wadeable streams basin-wide during 1997.

Land Use in the Basin



Land uses in the Patuxent River basin are primarily agricultural and forest. The basin covers an area of 957 square miles, with a population density of 909 people per square mile.







Oxygen - 1% of the streams had oxygen levels below the state water quality standard of 5 mg/L.



Nitrate - 42% of the streams had nitrate levels that may affect aquatic life (>1mg/L). The main sources of nitrates are farm fertilizers and acid rain.



Buffering Capacity - 2% of the streams are poorly buffered against acid rain.



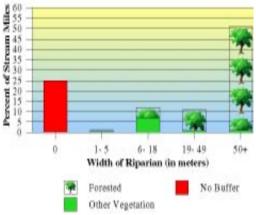
Good





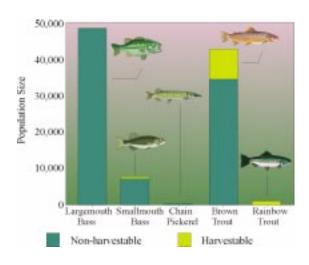
Riparian Zone

Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. The riparian buffers in the Patuxent basin are in fairly good condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.



Gamefish

There are five gamefish species found in the wadeable streams of the Patuxent basin. Most of the individuals were not of harvestable size, but it does appear that the wadeable tributary streams of the basin serve as a nursery for gamefish.





- ♦ The Patuxent River is the largest river that lies entirely in Maryland.
- ♦ The Patuxent River is the dividing line between Maryland's 410 and 301 telephone area codes.
- ♦ Bald eagles nest and overwinter in the basin.
- ♦ We may be losing an irreplaceable part of our natural heritage. At present there are at least 4 fish species in the basin that are at risk of local extinction, including American brook lamprey, glassy darter, stripeback darter, and warmouth.



The American brook lamprey, uncommon in Maryland, is found in the Patusent basin

Community Involvement

Want to help? These community groups can show you how!

Alliance for the Chesapeake Bay 6600 York Road, Suite 100 Baltimore, MD 21212 Kathleen Millan (410) 377-6270

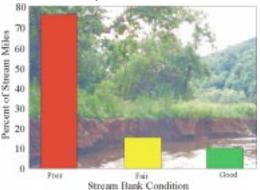
Citizens Monitors of St. Mary's County General Delivery St. Mary's City, MD 20686 Nancy Smith (301) 862-0405

Friends of St. Leonard Creek P.O. Box 308 Lusby, MD 20657 Joan Wohlgemuth (410) 326-3626 Hunting Creek Watershed Management P.O. Box 279 Huntingtown, MD 20639 Jack Leighty (410) 535-5870



Stream Bank Stability

Eroded, unstable banks reduce habitat quality in streams and contribute to water quality in downstream areas. The Patuxent basin stream banks are suffering. As lands within the basin were developed for agriculture and later urbanized, many miles of stream banks became highly eroded. Since streams in the basin flow into the Chesapeake Bay, this bank instability causes an increase in the downstream transport of nutrients and suspended sediments to the Bay.



Recreation

Popular activities in the basin include hiking, horseback riding, fishing, and canoeing. Numerous parks in the basin provide an opportunity for friends and family alike to appreciate and enjoy nature.



The Patuxent's scenic parks provide its visitors a chance to observe nature's beauty.

For more detailed information on streams in the Patuxent River basin and elsewhere in Maryland, contact Ann Smith of DNR/MANTA at (410) 260-8611 or email asmith@dnr.state.md.us.